REMARKS/ARGUMENTS

Claims 2-6 and 20-22 are pending herein. Claim 21 has been amended as supported by page 19 of the specification, for example. New claim 22 has been added as supported by Fig. 2(c) of the present application, for example.

1. Claims 2 and 21 were rejected under §102(b) over Komoto. To the extent that this rejection may be applied against the amended claims, it is respectfully traversed.

Claim 21 recites a ribbon polarization-maintaining fiber, comprising a plurality of polarization-maintaining fibers and a ribbon portion having first and second lateral ends, and a length of 2-300 mm surrounding at least some of the polarization-maintaining fibers. The polarization-maintaining fibers extend individually from the second lateral end of the ribbon portion. At least an external exposed surface of said ribbon portion comprises a material that can be stripped to expose the polarization-maintaining fibers without damaging the polarization-maintaining fibers.

The PTO's position is that Komoto discloses a ribbon portion of a ribbon polarization-maintaining fiber including a plurality of polarization-maintaining fibers, adhesive, and a capillary tube. The capillary tube, made of borosilicate glass, quartz, etc., is affixed to the polarization-maintaining fibers using the adhesive. In the context of amended claim 21, the capillary tube is the external exposed surface of the ribbon portion of Komoto.

Applicants respectfully submit that the underlying polarization-maintaining fibers will be damaged, destroyed or misaligned if any of the known glass removal methods are employed in an attempt to strip the glass capillary tube (i.e., the "external exposed surface") of the ribbon portion of Komoto. Known glass removal methods for such glasses include chemical decomposition, grinding, cutting, and compression. While all of these methods may work with unassembled glass and glass tubes, certain

relevant conditions must be remembered when applied to the present case. A significant purpose of the capillary tube in Komoto is to retain and strengthen the end portions of the delicate optical fibers. Therefore, the adhesive retaining the capillary tube is necessarily robust to eliminate the possibility of inadvertent removal, and the capillary tube is necessarily strong in relation to the delicate fibers. Using these factors, the four removal methods are discussed further below.

Using a chemical to dissolve the capillary tube will not function to remove the capillary tube portion (the "external exposed surface") of the ribbon in Komoto without damaging the underling fibers. Any solvent that dissolves the capillary tube will certainly dissolve or damage the finer optical fibers (which are also made of glass).

Grinding the capillary tube portion (the "external exposed surface") of the ribbon will also result in damaged fibers. Two dimensional surface grinding operations will not work for this purpose as only removing one side will fail to release the adhered fibers. Any subsequent fixturing would then be made against the delicate fibers resulting in damage. Turning or "O.D." grinding would be likewise impossible due to the tolerances required and the impossibility of safely supporting the remainder of the non-contained fiber.

Removing the capillary tube portion (the "external exposed surface") of the ribbon in Komoto by cutting would also fail to work, as glass cutting requires a scribe line and subsequent force to bend the part about the scribe line. A break of this sort would hinge about a point on the outside diameter of the capillary tube. Because the hinge point is a distance away from the contained fibers, the fibers would be forced to stretch a relatively significant distance, which is something glass fibers are unable to do with any degree of success. The optical fibers will fail before they stretch. Even if the capillary tube could be broken, the cured adhesive would retain any portion of the

fibers within the remaining capillary tube causing the fibers to break when the tube is removed.

Lastly, compression of the capillary tube will also fail to remove the tube without damaging the delicate fibers. Any compression required to fail the capillary tube will also compress the cured adhesive and fibers resulting in damage. This method would also result in misalignment, as the entire tube would break upon compression.

Simply stated, it would not be possible to strip the "exposed external surface" of the "ribbon portion" allegedly disclosed in Komoto without damaging the enclosed fibers, as claimed. Accordingly, Applicants respectfully request reconsideration and withdrawal of the §102(b) rejection.

2. Claims 3-6 and 20 were rejected under §103(a) over Komoto in view of Kozuka.

Applicants respectfully submit that the arguments submitted above distinguish claims 2 and 21 from Komoto. Since Kozuka does not overcome the deficiencies of Komoto, and since claims 3-6 and 20 depend either directly or indirectly from claim 21, those claims are also believed to be allowable over the applied art.

New claim 22 further defines features of the present invention which are patentable over the prior art. Claim 22 recites a polarization-maintaining fiber, wherein at least some of the polarization-maintaining fibers also extend from the first lateral end of the ribbon portion. Applicants respectfully submit that the fibers in Komoto do not extend from the first and second ends of the "ribbon portion" as recited in new claim 22.

If the Examiner believes that contact with Applicants' attorney would be advantageous toward the disposition of this case, the Examiner is herein requested to call Applicants' attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

May 23, 2005
Date

Stephen P. Burr
Reg. No. 32,970

SPB/TE/tlp

BURR & BROWN
P.O. Box 7068
Syracuse, NY 13261-7068

Customer No.: 025191
Telephone: (315) 233-8300
Facsimile: (315) 233-8320